



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/281,089	03/30/1999	HANS H. KUHN	1996A	6758

25280 7590 06/25/2003

MILLIKEN & COMPANY  
920 MILLIKEN RD  
PO BOX 1926  
SPARTANBURG, SC 29304

EXAMINER

GUARRIELLO, JOHN J

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 06/25/2003

12

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

89/281089

Applicant(s)

Kuhn et al.

Examiner

John Guarniello

Group Art Unit

1971

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 11/11/2002
- ☐ This action is FINAL.
- ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 1 1; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1-6 is/are pending in the application.
- ☐ Of the above claim(s) is/are withdrawn from consideration.
- ☐ Claim(s) is/are allowed.
- ☒ Claim(s) 1-6 is/are rejected.
- ☐ Claim(s) is/are objected to.
- ☐ Claim(s) are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 1771

### DETAILED ACTION

15. Pursuant to the Petition decision, paper # 12 of 1/11/2002, regarding 37 C.F.R. 1.181 the Examiner continues prosecution.

#### *Claim Rejections - 35 USC § 112*

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

17. Claims 1, 2, 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 1, line 1, it is not clear what the terms “coprecipitate” and “copolymer” encompass, since Iron oxide hydroxide and Aluminum oxide hydroxide are inorganic ionic species **not** polymeric species.

Art Unit: 1771

In claim 2, line 1, is is not clear what the phrase “substantially goethite” encompasses since there is only a small part which is actually “goethite”, which appears to be less than 50%, as noted in the instant specification on page 13, line 1. The specification cites lepidocrocite, hematite, magnetite or a combination of these forms.

In claim 6, it is not clear what aspects of the preamble “water filtration article” encompass since a dependent claim is to further limit the independent claim. This claim depends on claims 1 and 2, and it is not clear how this claim further limits, because this appears to be intended use without any specificity of structure.

Regarding applicant’s arguments with the 112 rejection concerning “copolymer/coprecipitate” it is the Examiner’s position they are not persuasive because a term in a claim may not be given a meaning repugnant to the usual meaning of the term. See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). Furthermore, while the Examiner concedes the existence of inorganic polymers, as noted by applicant’s reference to Hackh’s Chemical Dictionary,

Art Unit: 1771

applicant's claimed invention is directed to a three dimensional inorganic crystal lattice, not to a copolymer, as asserted, because there are no chains of monomer present in the claimed invention. Moreover, no covalent bonding is noted in the claimed invention regarding the use of the term "copolymer", especially directed to metals. The claimed invention appears to be amorphous alloys.

18. While applicant may be his or her own lexicographer, a term in a claim may not be given a meaning repugnant to the usual meaning of that term.

See *In re Hill*, 161 F.2d 367, 73 USPQ 482 (CCPA 1947). The term "coprecipitate/copolymer" in claim 1 is used to mean "copolymer", while the accepted meaning is "two monomers". The term "coprecipitate" is not equivalent to "copolymer".

***Claim Rejections - 35 USC § 103***

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 1771

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 1-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oishi et al. 4,911,957 in view of Watanabe et al. 4,435,220.

Oishi describes composite ferrite textiles and how a film can be deposited on a fibrous substrate (corresponding to a textile) within certain ranges of pH, and concentration of ions (column 1, lines 15-20; column 2, lines 1-14; lines 58-68). Oishi describes how other ions can be added, like aluminum in a water soluble salt forming a mixed species, (column 3, lines 1-10). Oishi differs from the claimed invention because the specific aluminum salts are not stated.

Watanabe describes transparent colored pigments of metal oxide or metal hydroxide, (column 2, lines 3-22). Watanabe describes coatings with colored metal oxides or metal hydroxides, (column 1, lines 1-12) which metal oxides or metal hydroxides are used for changing the color of pigments,

Art Unit: 1771

(column 3, lines 10-39). Watanabe describes Aluminum salts, (column 2, lines 6-40; column 3, lines 17-28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify ferrite textile of Oishi with the Aluminum hydroxide salts of Watanabe motivated with the expectation that the coating (corresponding to a film) produced on the textile would give enhanced properties of color reflectivity. It would be within the skill of the person of ordinary skill in the art to optimize the amounts of the components as Watanabe indicates, so as to achieve color shade by mixing proportions of the metal oxides, (column 3, lines 35-39).

Applicant's arguments the rejection as being improper have been considered, it is the Examiner's position that a finding of obviousness under 35 U.S.C. section 103 does not require absolute predictability, In re Lamberti, 545 F.2d 747,750, 192 USPQ 278, 280 (CCPA 1976). Furthermore, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But, so long as it takes into

Art Unit: 1771

account only knowledge which was within the level of ordinary skill at the time the invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper, see **In re Mc Laughlin, 443 F.2d 1392; 170 USPQ 209 (CCPA 1971)**. In the instant case, Oishi describes a ferrite film (Iron oxide) deposited on the surface or particles or fibers, (column 1, lines 65-68). Watanabe describes how metal salts and hydroxide can be used in combination with one another, and the proportions can be freely chosen to produce the precipitated oxide or hydroxide in film-like form on a generic substrate, (column 2, lines 48-68). The claimed invention taken as a whole without any criticality specified would still be obvious to one of ordinary skill in the art based on the applied teachings.

Applicant's arguments regarding specific reaction conditions have been noted, but the claimed invention is directed to an article, specifically a textile, and not a process. **Per MPEP 2113**, applicant has not shown how the process steps claim results in a materially different product. Applicant's arguments



Art Unit: 1771

regarding the motivation to use the pigment of Watanabe is non-analogous is noted. The determination that a reference is from non-analogous are it twofold, **In re Wood and Eversole, 202 USPQ 171 (CCPA 1979)**. First, decide if the reference is within the field of endeavor. If not, proceed to determine whether the reference is reasonably pertinent to the particular problem which the inventor was involved. Since metal oxide and hydroxides are described, and applicant's claimed invention encompasses metal oxides and hydroxides the second test of being reasonably pertinent is met. Thus, the pigment may be modified as noted in Oishi, (column 4, lines 50-53). Thus, there is the motivation to modify the pigment.

21. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Guarriello whose telephone number is (703) 308-3209. The examiner can normally be reached on Monday to Friday from 8 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be reached on (703) 308-2414. The

Art Unit: 1771

fax phone number for the organization where this application or proceeding is assigned is (703) 305-5408.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

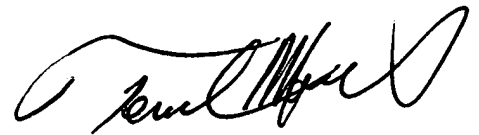


John J. Guarriello:gj

Patent Examiner

February 11, 2003

February 19, 2003



TERREL MORRIS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700